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(54) DRIVE DEVICE FOR INJECTION MOLDING MACHINE

(57) Abstract:

PROBLEM TO BE SOLVED: To extend the life of a ball screw by treating the ball of the ball screw on a drive device in the injection part and the mold clamping part of an injection molding machine through carburizing and nitriding.

SOLUTION: In the drive device 1 of an injection part, a nut 8 for a ball screw 6 is connected to a screw 4 for extruding a molten resin, and at the same time, a rotary drive source 5 for the injection part is connected to the threaded shaft 7 of the ball screw 6. In addition, in a mold clamping part drive device 2, the threaded shaft 26 of a ball screw 22 and either of the members of a nut 23 are connected to a movable platen 27, and a rotary drive source 24 for the mold clamping part is connected to the other member. Further, the threaded shafts 7, 26 and the nuts 8, 23 of the injection part and the mold clamping part are hardened as required. In addition, the balls of the ball screws 6, 22 are treated through carbonitriding. Under the described structure, the ball screw 6 of the drive part on which a high load and an impart load work is made to endure the use for a long time by the corbonitriding treatment. Consequently, it is possible to operate the injection molding machine stably for a long time.